

Infrastructure Study Guidelines

1. Infrastructure assessments do not need to be holistic (whole building) – building systems or even component parts can be evaluated.
2. The scope of work, methodology, assumptions, and exclusions for assessments need to be clearly documented.
3. Assessments must provide cost data conforming to the following requirements:
 - a. Utilizing prevailing wage rates.
 - b. Utilizing the state's escalation assumption of 5 percent, annually. Escalation shall be the start and midpoint of construction. Alternatively, costs can be reflected at the point of estimation, with escalation costs provided by the state.
 - c. Soft costs shall be provided by the state, not the estimator.
 - d. Scopes of work for estimating, including assumptions and exclusions, shall be detailed.
 - i. Scopes of work shall conform to all applicable state and agency policies and requirements.
 1. For new construction, this includes applicable state policies such as Zero Net Energy, childcare requirements, energy efficiency requirements, and electric vehicle charging infrastructure. Standardized estimating systems for new construction, such as the Marshall Valuation Service, can be utilized but must be adjusted to account for state or agency mandates.
 - ii. For repairs, all corollary or incidental work that is necessary to accomplish the repair, including additional work required by code as a result of the repairs, must be included in the estimate or specifically listed as an exclusion.
4. When assessing multiple buildings, or building systems within a group of buildings, a common methodology which provides a consistent identification, evaluation, and reporting of deficiencies must be utilized.
5. To the extent that Facility Condition Assessments (FCA) (or similar holistic building evaluation methodology) are to be employed as a methodology, the following additional criteria shall be adhered to:
 - a. Firms conducting the FCAs are to be provided a scope of work that specifies that the main objective of the facilities condition assessment is to measure the condition and functionality factors that make both the building and its infrastructure of adequate condition and appropriate for intended functions.
 - b. Firms shall, at a minimum:
 - i. Provide an inspection of facilities highlighting physical deficiencies.
 1. Physical inspections shall begin with data gathering. Where applicable, data to be collected should include a space inventory,

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building/infrastructure drawings, completed and pending deferred maintenance lists, prior assessments, and recent building reports,

2. Visual inspections shall be conducted by appropriately licensed professionals, as applicable, and shall include recorded observations from maintenance staff.
- ii. Assist in identifying deferred and ongoing maintenance needs.
 1. Data collected shall be summarized in a clear manner, consistently across buildings/systems, and in conformity to industry standards.
 2. Existing deficiencies identified shall be categorized and made sortable. To the extent practical, deficiency lists shall be categorized by building system, impact to the building, and probability of failure.
 3. An evaluation as to the completion of regular maintenance shall be performed.
 - iii. Specify costs for both a building renovation, as well as costs for building replacement.
 - iv. Develops cost forecasts and schedules for correction of physical deficiencies.
- c. Buildings must be similar enough to generate a comparison. For example, office and warehouse spaces should not be compared against each other to form a ranking/hierarchy.
 - d. Buildings in temporary use should not be evaluated unless expected to be converted to permanent use or otherwise planned to be occupied long-term.
 - e. When buildings are evaluated, a Facilities Condition Index (FCI) shall be established. An FCI is the cost to repair all identified deficiencies from the FCA divided by the building replacement cost and is expressed as represented by a percentage from 0% to 100%
 - f. The resultant FCI shall then be rated using a four-part scale (GOOD, FAIR, POOR, and CRITICAL).
 - i. Because there is no industry standard scale, the specific range of FCIs associated with each rating shall be developed by the agency and A&E firm undertaking the FCAs. The ranges shall generally depend upon the degree of investigation performed and whether specific FCA models/methods were employed.
 - ii. The following four-part rating system should be utilized for evaluation and prioritization of infrastructure:

Good	Fair	Poor	Critical
0-15%	16-25%	26-60%	60%+